UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,224	07/24/2000	Norishige Kakuno	Q60222	5390

7590 06/06/2005

Sughrue Mion Zinn MacPeak & Seas PLLC
2100 Pennsylvania Avenue N W
Washington, DC 20037-3202

EXAMINER	
PHAM, THIERRY L	
ART UNIT	PAPER NUMBER
2624	

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

MAILED
JUN 0 6 2005
Technology Center 2600

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/624,224
Filing Date: July 24, 2000
Appellant(s): KAKUNO, NORISHIGE

Allison M. Tulino
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed March 08, 2005.

(1) Real Party of Interest

Party of interest contained in the brief is correct.

(2) Related Appeals and Interferences

The statement of Related Appeals and Interferences contained in the brief is correct.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments

The statement of status of amendments in the brief is correct.

(5) Summary of the Claimed Subject Matter

The summary of the claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection To Be Reviewed on Appeal

The ground of rejection to be reviewed on appeal contained in the brief is correct.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al (EP 820004).

Regarding claim 17, Suzuki further discloses a printing method to be used in a printer system (print system, fig. 1) combining a printer device (printer device 3, fig. 1) and a data processing device (host computer 1, fig. 1), comprising:

- a determination step (language interpret part 81 (Fig. 4) within the controller 11 of Fig. 1 for determining types of language, col. 7, lines 53-59 to col. 8, lines 1-10) for determining the type of language of input print data (i.e. PDL or intermediate language, abstract and col. 4, lines 28-35), selecting an intermediate code generating means (GRM for converting PDL to PIM, Fig. 4, col. 8, lines 5-25) on the basis of the determination result, and delivering said print data to (print data is sent to controller 11, fig. 1) said selected intermediate code generating means (GRM, fig. 4, col. 8, lines 5-25), in said printer device; and
- an intermediate code generating step (GRM 83 also includes intermediate code convert part 85, Fig. 4, col. 7, lines 53-59 to col. 8, lines 1-5) for generating the intermediate code compatible (i.e. PIM codes, fig. 4) with the print data by performing language analysis (language interpret part 81, fig. 4) of print data, and outputting the intermediate code identification information (identification number, col. 8, lines 1-10), in an intermediate code generating means of said printer device or an intermediate code generating means of said data processing device (DIM code together with the identification number, col. 5, lines 1-10); and
- a print control step (controller of printer, Fig. 1) for selecting an intermediate code rasterizing means (controller 11 further converts bit image data from PIM codes, col. 5, lines 35-40) on the basis of intermediate code identification information (identification number, col. 8, lines 1-10) input from the intermediate code generating means, controlling print image (controller of printer, Fig. 1) information rasterized by said selected intermediate code rasterizing means (controller 11 further converts bit image data from PIM codes, col. 5, lines 35-40) to be stored in a prescribed storage area (stores bit image in image buffer 15 which rasterized from PIM, fig. 4, col. 8, lnes 30-33) of said printer device, and printing (printer, fig. 1) on the basis of said stored print image information, in said printer device.

Regarding claim 18, Suzuki further discloses a printing method according to Claim 17 using the data processing device comprising the intermediate code generating means (intermediate code convert part, Fig. 4, col. 7, lines 53-59 to col. 8, lines 1-5), wherein the

intermediate code of said data processing device is capable of analyzing the print data described in a language not corresponding (apparently, PDL languages are not the same as intermediate code languages, Fig. 1, col. 12, lines 27-49) to the intermediate code generating means of said printer device.

Regarding claim 19, Suzuki further discloses a printing method according to Claim 17, wherein said print control step selects (controller of printer, Fig. 1) an intermediate code rasterizing means (GRM, Fig. 4, col. 8, lines 5-25) with reference to the corresponding relation between intermediate code identification information and the intermediate code rasterizing means.

Regarding claim 20, Suzuki further discloses a computer readable medium storage medium (memory, fig. 2) storing a program for making a computer executable the printing method according to anyone of claims 17-19.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (EP 820004), and in view of Parker et al (U.S. 6441919).

Regarding claims 1-2, Suzuki discloses a printing system (fig. 1) comprising:

- a host (host computer, fig. 1) operable to output print data compatible with at least one of a plurality of different printer languages (PDL and intermediate codes, abstract and co. 2, lines 10-67 and col. 6, lines 1-7);

• a data processing device (printer controller 11, fig. 4) comprising: (a) a plurality of intermediate code generators (selecting from a plurality of intermediate code generators to generate intermediate code, col. 2, lines 10-67 and col. 4, lines 24-40, i.e. GRM 83 for converting PDL to PIM and intermediate code conversion 85 for converting DIM to PIM, col. 8, lines 5-24), at least one being operable to generate intermediate code compatible (i.e. PIM, fig. 4) with the print data by performing language analysis (language interpreter 81, fig. 4, col. 7, lines 53-67) of the print data; and

• printer (printer, fig. 1) comprising printing means (print engine 17, fig. 4) for controlling the print image information rasterized by the intermediate code rasterizing means (controller 11 includes a conversion means for converting intermediate codes to bit image data, col. 2, lines 10-27 and col. 8, lines 25-34) to be stored in a prescribed storage area (image buffer 15, fig. 1, col. 5, lines 35-47) of said printer, and printing (print engine 17 for printing image data stored in image buffer 15, fig. 4) on the basis of said stored print image information.

However, Suzuki does not explicitly disclose wherein a data processing device comprising plurality of intermediate code rasterizing means for respectively rasterizing the generated code into print image information.

Parker, in the same field of endeavor for printing, teaches a data processing device comprising plurality of intermediate code rasterizing means (plurality of rasterizer compositors 27a-27n, figs. 1-3, abstract and col. 2, lines 30-45 and col. 3, lines 20-35) for respectively rasterizing the generated code into print image information.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify printer controller 11 (fig. 4) of Suzuki to include a plurality of rasterizer compositors (ref# 27a-27n, fig. 1) as per teachings of Parker because of a following reason: (•) enabling high-speed printing by converting intermediate code (i.e. DIM) to another intermediate code (i.e. PIM) and then develops the intermediate code to a bit image (i.e. rasterizing) (Suzuki, col. 2, lines 38-40 and abstract); (•) using plurality/parallel of rasterizer compositors increase and/or improve printing speed (Parker, col. 4, lines 27-33).

Therefore, it would have been obvious to combine Suzuki with Parker to obtain the invention as specified in claims 1-2.

Regarding claim 3, Suzuki further discloses a printer system according to Claim 2, wherein said printer device further comprises determination means (language interpret part (Fig. 4) within the controller of Fig. 1, col. 7, lines 53-59 to col. 8, lines 1-10) for determining which of the plurality of different printer languages (PDL and intermediate codes, abstract and co. 2, lines 10-67 and col. 6, lines 1-7) input print data, selecting an intermediate code generating means (GRM, Fig. 4, col. 8, lines 5-25) on the basis of the determination result, and delivering said print data to said selected intermediate code generating means (intermediate code convert part, Fig. 4, col. 8, lines 5-25).

Regarding claim 4, Suzuki further discloses a printer system according to any one of Claims 1 to 3, wherein said intermediate code generating means generates an intermediate code as well as outputs identification information (Intermediate Code includes identification number, col. 4, lines 50-60 to col. 5, lines 1-10) of the intermediate code to said printing means, and wherein said printing means selects (controller of printer, Fig. 1) an intermediate code rasterizing means on the basis of intermediate code identification information input from the intermediate code generating means, and controls print image information rasterized by said selected intermediate code rasterizing means stored in a prescribed storage area of said printer device.

Regarding claim 5, Suzuki further discloses a printing system according to Claim 4, wherein said printer stores the corresponding relation (identification numbers of characters and bit images appear in the same band, col. 5, lines 1-10) between intermediate code identification information and the intermediate code rasterizing means, and selects an intermediate code rasterizing means with reference to the corresponding relation.

Regarding claim 6, Suzuki further discloses a printing system according to Claim 4, wherein said intermediate code identification information includes address information (band numbers declaration, Fig. 3 (a-e), col. 7, lines 2-30) for calling the corresponding intermediate code rasterizing means.

Regarding claim 7, Suzuki further discloses A printing system according to Claim 4, wherein said intermediate code geneator further outputs information of bandwidth and bandheight (intermediate codes include size specifications, col. 5, lines 1-10) compatible with an intermediate code, and wherein said printing means (printer, fig. 1) restructures (bands arrangement, Fig. 3D, col. 9, lines 20-40) said storage (image buffer, Fig. 1) area on the basis of information of bandwidth and bandheight input through the intermediate code generator, and controls said rasterized print image information to be stored in said prescribed storage area restructured in band units (band units, col. 3, lines 7-10).

Regarding claims 8-9, Suzuki discloses a printer device (printer 3 includes printer controller 11, fig. 1), comprising:

- a determination means (printer controller 11, fig. 4) for determining (printer controller 11 includes language interpret part 81 for determining type of language of incoming print data, fig. 4, col. 7, lines 53-59 to col. 8, lines 1-10) the type of language of input print data, selecting from a plurality of intermediate code generating means (selecting from a plurality of intermediate code generators to generate intermediate code, col. 2, lines 10-67 and col. 4, lines 24-40, i.e. GRM 83 for converting PDL to PIM and intermediate code conversion 85 for converting DIM to PIM, col. 8, lines 5-24), on the basis of the determination result, and delivering said print data to said selected intermediate code generating mean, and
- printing means (print engine 17 for outputting image data stored in image buffer 15, fig. 4) for controlling print image information rasterized by intermediate code rasterizing means (controller 11 includes a conversion means for converting intermediate codes to bit image data, col. 2, lines 10-27 and col. 8, lines 25-34) to be stored in a prescribed storage area (i.e. image buffer 15, fig. 4) of said printer device, and printing on the basis of said stored print image information.

However, Suzuki discloses intermediate code identification information (intermediate code includes identification number, col. 4, lines 50-60 to col. 5, lines 1-10) input from selected intermediate code generating means, but fails to disclose wherein a printer device comprising plurality of intermediate code rasterizing means.

Parker, in the same field of endeavor for printing, teaches a data processing device comprising plurality of intermediate code rasterizing means (plurality of rasterizer compositors,

figs. 1-3, abstract and col. 2, lines 30-45 and col. 3, lines 20-35) for respectively rasterizing the generated code into print image information.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Suzuki as per teachings of Parker because of a following reason: (1) enabling high-speed printing (Suzuki, col. 2, lines 38-40).

Therefore, it would have been obvious to combine Suzuki with Parker to obtain the invention as specified in claims 8-9.

Regarding claim 10, Suzuki further discloses a printer device according to claim 9, wherein said printing means stores the corresponding relation (identification numbers of characters and bit images appear in the same band, col. 5, lines 1-10) between intermediate code identification information and intermediate code rasterizing means, and selects the intermediate code rasterizing means with reference to the corresponding relation.

Regarding claim 11, Suzuki further discloses a printer device according to claim 9, wherein said intermediate code identification information includes address information (band numbers declaration, Fig. 3 (a-e), col. 7, lines 2-30) for calling the corresponding intermediate code rasterizing means.

Regarding claim 12, Suzuki further discloses a printer device according to any one claims 8-11, wherein said printing means restructures bandwidth and bandheight (intermediate codes include size specifications, col. 5, lines 1-10) which comply with each intermediate code, and controls said rasterized print image information to be stored in said prescribed storage area restructured in band units (band units, col. 3, lines 7-10).

Regarding claim 13, Suzuki further discloses a data processing device (printer controller 11, fig. 4) to be used in combination with a printer device (printer, fig. 1), comprising:

- a plurality of intermediate code generating means (plurality of intermediate code generators to generate intermediate code, col. 2, lines 10-67 and col. 4, lines 24-40, i.e. GRM 83 for converting PDL to PIM and intermediate code conversion 85 for converting DIM to PIM, col. 8,

lines 5-24) for generating intermediate code compatible with print data by performing language analysis (language interpreter 81, fig. 4, col. 7, lines 53-67) of the print data, and

- intermediate code rasterizing means (controller 11 includes a conversion means for converting intermediate codes to bit image data, col. 2, lines 10-27 and col. 8, lines 25-34) for rasterizing corresponding generated intermediate code from a selected one of said intermediate code generating means into print image information;
- wherein the intermediate code generating means (plurality of intermediate code generators to generate intermediate code, col. 2, lines 10-67 and col. 4, lines 24-40, i.e. GRM 83 for converting PDL to PIM and intermediate code conversion 85 for converting DIM to PIM so it compatible with print engine, col. 8, lines 5-24) of said data processing device other than the selected intermediate code generating means are capable of analyzing print data described in a language incompatible with said printer device alone.

Regarding claim 14, Suzuki further discloses a data processing device according to claim 13, wherein the intermediate code generating means of said data processing device generates intermediate code as well as outputs identification information of (Intermediate Code includes identification number, col. 4, lines 50-60 to col. 5, lines 1-10) the intermediate code to said printer device.

Regarding claim 15, Suzuki further discloses a data processing device according to claim 14, wherein said intermediate code identification includes address information (band numbers declaration, Fig. 3 (a-e), col. 7, lines 2-30) for calling the compatible intermediate code rasterizing means.

Regarding claim 16, Suzuki further discloses a data processing device according to any one of claims 13-15, wherein intermediate code generating means of said data processing device further outputs information of bandwidth and bandheight (intermediate codes include size specifications, col. 5, lines 1-10) compatible with the intermediate code (or language) to said printer device.

(7) Response to Arguments

• Regarding claim 17, the applicant argued the cited prior art of record (EP 820004) fails to teach and/or suggest selecting an intermediate code generating means on the basis of the determination result, and fails to teach and/or suggest various types of languages.

In response, the examiner first notes the limitations as cited in claim 17 do not recall and/or recite any indication of selecting an "intermediate code generating means" from ***a plurality of*** intermediate code generating means. In broadest interpretation, "selecting an intermediate code generating means" as cited in claim 17 simply represents a ***single*** intermediate code generating means ***rather than from plurality of intermediate code generating means***. However, Suzuki explicitly discloses two intermediate code generating means (i.e. printer controller 11 includes GRM 83 and Intermediate code convert part 85, fig. 4) and two types of languages (i.e. PDL and Intermediate Language, fig. 1, abstract and col. 4, lines 24-41). Printer controller 11 incorporated within the printer 3 includes a language interpret part 81 for determining the types of languages (i.e. PDL or Intermediate code, fig. 1 & fig. 4) transmitted from the host computer 1. Upon a positive determination, if the incoming print job data is expressed in PDL format, GRM 83 converts PDL format to a PIM format (printer intermediate code format), and if the incoming print job data is expressed in DIM format (driver intermediate code format which expressed in Intermediate Language), an intermediate code conversion part 85, which is a function that is added to the GRM 83 for converting DIM to PIM format, fig. 4, col. 5, lines 23-34 and col. 7, lines 53-60 to col. 8, lines 1-24.

• In addition, the applicant repeatedly argued the cited prior art of record (EP 820004) fails to teach and/or suggest various "types of languages" including PCL, ESC/Page, PostScript, and even PDL and also argued the intermediate code DIM does not constitute a "type" of language of an input print data. The examiner notes the limitations as cited in claim 17 does not specify a specific type of language (i.e. PDL, PostScript, PCL, and ESC) and the originally filed specification does not recall and/or support type of language including PDL, PostScript, PCL, and ESC). ***The originally filed specification simply disclosed plurality of languages, but did not state what represents a language and what does not represent a language.*** Suzuki explicitly teaches two types of languages (PDL and Intermediate Language (IML), abstract and

col. 4, lines 23-42) of input print data generated from the host computer 1. The intermediate code to be generated by the printer driver 9 (within host computer 1) is referred to as a driver intermediate code (DIM) code, whereas the intermediate code to be generated by the page printer 3 is referred to as a printer intermediate code (PIM) code, col. 4, lines 38-42. Apparently, DIM is a type of language expressed in Intermediate Language format.

• In addition, the applicant also argued the cited prior art of record (EP 820004) fails to teach and/or suggest selecting an intermediate code rasterizing means on the basis of the PIM code.

In response, the examiner disagrees with such assertions. The examiner first notes the limitations as cited in claim 17 do not recall and/or recite any indication of selecting an "intermediate code rasterizing means" from ***a plurality of*** intermediate code rasterizing means. In broadest interpretation, "selecting an intermediate code rasterizing means" as cited in claim 17 simply represents a single intermediate code rasterizing means rather than from plurality of intermediate code rasterizing means. According to the originally filed specification, intermediate code rasterizing means receives address information from the print control means and reads out one band worth of intermediate codes in prescribed order and rasterized into bit images and stored on the basis of the address information (page 13, second paragraph). Suzuki explicitly teaches GRM 83 for reading PIM code stored in code buffer 13 and develops a bit map image on the image buffer 15 in accordance with the read-out PIM code (col. 8, lines 30-34). By comparison, the features presented by Suzuki meet the intermediate code rasterizing means as cited in claim 17. Clearly, Suzuki meets all the limitations cited in claim 17 as argued by the applicant, see pages 11-15.

• Regarding claim 1, the applicant argued the cited prior art of record (EP 820004 to Suzuki et al) fail to teach and/or suggest a data processing device comprising a plurality of intermediate code generators and various types of language.

In response, Suzuki explicitly teaches data processing device comprising a plurality of intermediate code generators (i.e. printer controller 11 includes GRM 83 and Intermediate code convert part 85, fig. 4) and various types of language and two types of languages (i.e. PDL and Intermediate Code Language, fig. 1, abstract and col. 4, lines 24-41), and please see response to

argument (claim 17) as discussed above for more details. According to the originally filed specification, data processing device may ***be set within one printer body*** (page 10, 2nd paragraph). Apparently, printer controller 11 as taught by Suzuki is set within printer 3, fig. 1; therefore, it meets the limitations as cited in claim 1.

• Regarding claim 2, the applicant argued the cited prior art of record (EP 820004 to Suzuki et al) fails to teach and/or suggest a printer that comprises a plurality of intermediate code generators, at least one being operable to generate code compatible with the print data by performing language analysis of the print data.

In response, Suzuki explicitly teaches a printer that comprises a plurality of intermediate code generators (i.e. printer controller 11 includes GRM 83 and Intermediate code convert part 85, fig. 4), at least one being operable to generate code compatible (plurality of intermediate code generators to generate intermediate code, col. 2, lines 10-67 and col. 4, lines 24-40, i.e. GRM 83 for converting PDL to PIM and intermediate code conversion 85 for converting DIM to PIM, col. 8, lines 5-24) with the print data by performing language analysis (language interpret part 81, fig. 4) of the print data.

• Regarding claims 3-7, the applicant argued the cited prior art of record (EP 820004 to Suzuki) fails to teach and/or suggest a particular intermediate code generator is selected based on a plurality of different printer languages.

In response, Suzuki explicitly teaches intermediate code generator is selected based on a plurality of different printer languages (printer controller 11 includes GRM 83 and Intermediate code convert part 85, fig. 4 and plurality of intermediate code generators to generate intermediate code, col. 2, lines 10-67 and col. 4, lines 24-40, i.e. GRM 83 for converting PDL to PIM and intermediate code conversion 85 for converting DIM to PIM, col. 8, lines 5-24).

• Regarding claim 8, the applicant argued the cited prior art of record (EP 820004 to Suzuki) fails to teach determination means for determining the type of language of input print data, and selecting from a plurality of intermediate code generator means on the basis of the determination result.

In response, Suzuki explicitly teaches a determination means (printer controller 11, fig. 4) for determining (printer controller 11 includes language interpret part 81 for determining type of language of incoming print data, fig. 4, col. 7, lines 53-59 to col. 8, lines 1-10) the type of language of input print data, selecting from a plurality of intermediate code generating means (selecting from a plurality of intermediate code generators to generate intermediate code, col. 2, lines 10-67 and col. 4, lines 24-40, i.e. GRM 83 for converting PDL to PIM and intermediate code conversion 85 for converting DIM to PIM, col. 8, lines 5-24) on the basis of the determination result.

• Regarding claim 13, the applicant argued the cited prior art of record (EP 820004 to Suzuki) fails to teach and/or suggest a data processing device that comprises a plurality of intermediate code generating means for generating intermediate code compatible with print data by performing language analysis of print data, or wherein the intermediate code generating means of said data processing device other than the selected intermediate code generating means are capable of analyzing print data described in a language incompatible with said printer device alone.

In response, Suzuki explicitly teaches a data processing device (printer controller 11, fig. 4) that comprises a plurality of intermediate code generating means (plurality of intermediate code generators to generate intermediate code, col. 2, lines 10-67 and col. 4, lines 24-40, i.e. GRM 83 for converting PDL to PIM and intermediate code conversion 85 for converting DIM to PIM, col. 8, lines 5-24) for generating intermediate code compatible with print data by performing language analysis (language interpreter 81, fig. 4, col. 7, lines 53-67) of the print data, and wherein the intermediate code generating means (plurality of intermediate code generators to generate intermediate code, col. 2, lines 10-67 and col. 4, lines 24-40, i.e. GRM 83 for converting PDL to PIM and intermediate code conversion 85 for converting DIM to PIM so it compatibles with print engine, col. 8, lines 5-24) of said data processing device other than the selected intermediate code generating means are capable of analyzing print data described in a language incompatible (GRM 83 for converting non-compatible language to a printer compatible language, for example, PDL to PIM) of fig. 4 for converting with said printer device alone.

The originally filed specification simply disclosed plurality of languages, but did not state what represents a language and what does not represent a language and did not state what language is compatible and/or not compatible with a printer device. Suzuki explicitly teaches two types of languages (PDL and Intermediate Language (IML), abstract and col. 4, lines 23-42) of input print data generated from the host computer 1. The intermediate code to be generated by the printer driver 9 (within host computer 1) is referred to as a driver intermediate code (DIM) code, whereas the intermediate code to be generated by the page printer 3 is referred to as a printer intermediate code (PIM) code, col. 4, lines 38-42. Apparently, DIM is a type of language expressed in Intermediate Language format.

(8) Evidence Appendix

The statement of evidence appendix contained in the brief is correct.

(9) Related Proceedings Appendix

The statement of related proceedings appendix contained in the brief is correct.

(10) Prior Arts of Record

EP 820004 to Suzuki et al

US 6441919 to Parker et al

(11) Examiner's Answer, Conclusion

For the above reasons, it is believed that the rejections should be sustained.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. 5671341 to Kashiwazaki et al, discloses an apparatus/method for converting print data into printer language (i.e. PDL, intermediate, and raster code).
- E.P. 782067 to Shima, discloses an apparatus/method for converting job language into printer language (PDL, intermediate code).

Respectfully submitted,

Thierry L. Pham

Conferees:
David Moore (AU 2624 SPE)

DAVID MOORE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Edward Coles (AU 2622 SPE)

EDWARD COLES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Gabriel Garcia (AU 2624 Primary Examiner)